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09/272,810	03/19/1999	RICHARD J. CARTER	10982056-1	6119

			EXAMINER
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Technology Center 2100

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 09/272,810
Filing Date: March 19, 1999
Appellant(s): CARTER ET AL.

Jody C. Bishop
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed on 12/02/2005 appealing from the Office

action mailed on 08/03/2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

Appeal No. 2003-1488 of Application No. 09/272,810.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,125,401	Huras et al.	09/2000
6,563,821	Hong et al.	05/2003

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1.   Claims 1-31 are presented for examination.

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102

that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> or
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3.   Claims 1-4, 6-11, and 13-21 are rejected under U.S. Code § 102 (e) as being anticipated by Huras et al. (Huras) patent no. 6,125,401.

4.   As to claim 1, Huras teaches a method comprising:

establishing a network connection between a server and an external client, the network connection including a client-to-server channel and a sever-to-client channel (figure 1; col. 1 lines 10-55; col. 4 lines 39-65 ; col. 5 lines 10-23);

receiving at the server a request from the client for a response by the server (col. 6 lines 17-32; col. 7 lines 23-56);

before preparing a response to the client request, the server examining local server information to determine whether the client-to-server channel of the network connection with the requesting client is still established (col. 7 line 57 - col. 8 line 9 and col. 8 lines 59-67); and

the server not preparing the response to the client request if the client-to-server

channel is determined to be no longer established (col. 1 lines 11-25; col. 4 line 39 - col.

8 line 67; specially col. 7 line 37 - col. 8 line 67).

5.   As to claims 2-4 and 6-7, Huras teach the state of the server-to-client channel is

inferred after reading from client-to-server channel; a read buffer is being used to

determine whether the client-to-server channel is still established; specific state of the

connection is determined by examining local information in the server, and interrupt on

the server when the client-to-server channel is determined to be no longer established.

In addition, Huras teaches that polling is being used despite of some disadvantages

(col. 1 lines 43-55; col. 2 lines 35-44; col. 4 line 39 - col. 8 line 67).

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the subject
> matter sought to be patented and the prior art are such that the subject matter as a
> whole would have been obvious at the time the invention was made to a person having
> ordinary skill in the art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

7.   Claims 5, 12, and 22-31 are rejected under 35 U.S.C. § 103 (a) as being

unpatentable over Huras et al. (Huras) patent no. 6,125,401, in view of Hong et al.

(Hong) patent no. 6,563,821.

8.   As to claim 5, Huras teaches the invention substantially as claimed as discussed above;   However, Huras does not explicitly teach the client-to-server channel is determined to be no longer established if the local information indicates that the client-to-server channel is in a "CLOSE_WAIT" state.

Hong teaches determining a user connection termination by examining a CLOSE_WAIT state, and a server will issue a socket CLOSE call in a remote communications server system supports a plurality of communications sessions between multiple dial-in users and a network (Abstract, col. 30 lines 36-42).

It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of Huras and Hong to determine if the client-to-server channel is no longer established by examining if the local information indicates that the client-to-server channel is in a "CLOSE_WAIT" state because it would allow server to provide more users simultaneously access to the network.

9.   As to claim 22-23, Hong teaches a web server and a web page requested by the client (col. 34 lines 44-56).

10.   Claims 8-31 have similar limitations as claims 1-7 and 22-23; therefore, they are rejected under the same rationale.

(10) Response to Arguments

(I) As to group I, Applicant's arguments related to limitations in claims 1, 8, 15-16, and 21.

(I-a)   Applicant argues that prior art does not teach a connection between a server and an external client.

As to point (I-a), Huras teaches a client-server system with single machine computer system such as a mainframe computer 100 **connects** to a terminal 141 and a personal computer 151 in figure 1. When the terminal 141 or the personal computer 151 runs an application which is designed to interact with a service provider, the application program establishes the client process 140 or 150 running on the computer system 100 via **the connection**. Huras teaches a client-server system where the terminal and the personal computer both inherently have network interface cards that connect to the main computer via a network (figure 1; col. 1 lines 10-55; col. 4 lines 39-65; col. 5 lines 10-23).

(I-b)   Applicant argues that prior art does not teach determine whether the client-to-server channel of the network connection with the requesting client is still established.

As to point (I-b), Huras teaches a user operating the terminal 141 or 151 runs an application which is designed to interact with the service provider, the application program establishes the client process 140 or 150 running on the computer system 100 via the connection as discussed in item (I-a) above. In addition, Huras teaches determining whether the connection of the terminal 141 or 150 and the computer system 100 is still established by using send and receive semaphores 256 and 258 to verify whether the client process is still established or terminated (e.g., to verify if the client process still interacts with the

client application to send and receive data; col. 5 lines 10-23; col. 7 line 37 - col. 8 line 67).

(I-c)   Applicant argues that prior art does not teach the server not preparing the response to the client request if the client-to-server channel is determined to be no longer established.

As to point (I-c), In addition to rationale given by Examiner in items (I-a and I-b) as discussed above, Huras teaches determining whether the connection of the terminal 141 or 150 and the computer system 100 is terminated by using the send semaphore 256 to verify whether the client process is terminated because of any reason (e.g., the client process is terminated either because of the application has completed its processing, or because of the operating system terminated the client process for some reason). Moreover, **Huras teaches the computer system 100 terminates resources (interprocess communication resources 200 or 210, figure 1) allocated to the client process to free up system resources if determined that the client process is terminated because of any reason (col. 7 line 37 - col. 8 line 67)**.

(II) As to group II, Applicant's arguments related to limitations in claims 2, 9, and 17.

(II-a)   Applicant argues that prior art does not teach a state of the server-to-client channel is inferred according to whether the client-to-server channel is still established.

As to point **(II-a)**, Examiner notes that applicant raises new arguments that have not been submitted in any prior submissions by the applicant. As discussed in item (I-b and I-c) above, Huras teaches determining whether the connection of the terminal 141 or 150 and the computer system 100 is still established or terminated by using send and receive semaphores 256 and 258 to verify whether the client process is still established or terminated. The application program resides on the terminal 140 establishes the client process running on the computer system 100 through the connection which comprises client-to-server and server-to-client channels.   **The state of the client process taught by Huras indicates the state of the connection, the state of client-to-server channel, and the state of the server-to-client channel**. Therefore, Huras teaches the state of the server-to-client channel can be inferred from the state of the client-to-server channel or in according to whether the client-to-server channel is still established (col. 5 lines 10-23; col. 7 line 37 - col. 8 line 67).

(II-b) Applicant argues that prior art does not teach the server does not prepare the response to the client request if the server-to-client channel is inferred to be closed.

As to point **(II-b)**, Examiner notes that applicant raises new arguments that have not been submitted in any prior submissions by the applicant. This items can be addressed using rationale given by Examiner in items (I-c and II-a) as discussed above where Examiner has shown Huras teaches state of the server-to-client channel can be inferred according to the state of the client-to-server

channel. In other words, the state of server-to-client channel is the same as the state of the client-to-server channel. Examiner also shows that Huras teaches the server not preparing the response to the client request if the client process indicates that client-to-server channel is terminated. Since the state of the client-to-server and the state of server-to-client are the same, Huras teaches the server not preparing the response to the client request if the client process indicates that server-to-client channel is terminated.

(III) As to group III, Applicant's arguments related to limitations in claims 3 and 10.

Applicant argues that prior art does not teach a read buffer that is probed to determine whether the client-to-server channel is still established.

As to point **(III)**, Examiner notes that applicant raises new arguments that have not been submitted in any prior submissions by the applicant. Moreover, Huras teaches server allocates **shared memory segment 240 or 250 (read buffer)**. The server also allocates flags and semaphores for controlling and synchronizing access to the shared memory segment, and also for determining whether the client-to-server channel is still established (col. 7 line 37 - col. 8 line 67).

(IV) As to group IV, Applicant's arguments related to limitations in claims 4, 11, and 18.

(IV-a) Applicant argues that prior art does not teach server maintains local information about the state of the client-to-server channel.

As to point (IV-a), Examiner notes that applicant raises new arguments that have not been submitted in any prior submissions by the applicant. As discussed above, Huras teaches the **server allocates and maintains the client process (local information) which indicates the state of the client-to-server channel**. As discussed in item (II-a) above, the state of the client process indicates the state of client-to-server channel.

(IV-b) Applicant argues that prior art does not teach the response preparation is aborted if the local information indicates that the client-to-server channel is in the specific state.

As to point (IV-b), Examiner notes that applicant raises new arguments that have not been submitted in any prior submissions by the applicant. This items can be addressed using rationale given by Examiner in items (IV-a and I-c) discussed above where Examiner has shown Huras teaches server maintains local information about the state of the client-to-server channel. Examiner also shows that Huras teaches the server not preparing the response to the client request if the client process indicates that client-to-server channel is terminated.

(V) As to group V, Applicant's arguments related to limitations in claims 6, 13, and 19.

(V-a) Applicant argues that prior art does not teach polling local information to determine the state of the client-to-server channel.

As to point **(V-a)**, Examiner notes that applicant raises new arguments that have not been submitted in any prior submissions by the applicant. Moreover, Huras teaches conventional system inherently uses polling mechanism for polling client process (polling local information) to determine state of the client-to-server channel (col. 1 lines 43-55; col. 2 lines 35-44).

(V-b) Applicant argues that prior art does not teach whether abort preparation of a response to an external client if a client-to-server channel is determined to no longer be established.

As to point **(V-b)**, Examiner discusses this arguments in item (I-c) above.

(VI) As to group VI, Applicant's arguments related to limitations in claims 7, 14, and 20.

(VI-a) Applicant argues that prior art does not teach generating an interrupt on the server when the client-to-server channel is determined to be no longer established.

As to point **(VI-a)**, Examiner notes that applicant raises new arguments that have not been submitted in any prior submissions by the applicant. Moreover, Huras teaches the **send semaphore (interrupt)** on the server was posted by the operating system to indicate the termination of the client process

which indicates the client-to-server channel is determined to be no longer established as discussed above.

(VI-b) Applicant argues that prior art does not teach aborting preparing the response before the response is prepared for sending to the requesting client in response to the interrupt that indicates the client-to-server channel is no longer established.
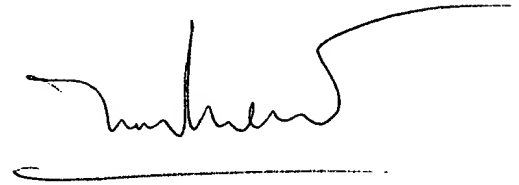
As to point **(VI-b)**, Examiner notes that applicant raises new arguments that have not been submitted in any prior submissions by the applicant.   This items can be addressed using rationale given by Examiner in items (VI-a and I-c) discussed above where Examiner has shown Huras teaches generating an interrupt on the server when the client-to-server channel is determined to be no longer established.   Examiner also shows that Huras teaches the server not preparing the response to the client request in response to the send semaphore that indicates that the client process (client-to-server channel) is terminated.

(11) Related Proceeding(s) Appendix

Copies of the court or Board decision(s) identified in the Related Appeals and Interferences section of this examiner's answer are provided herein.
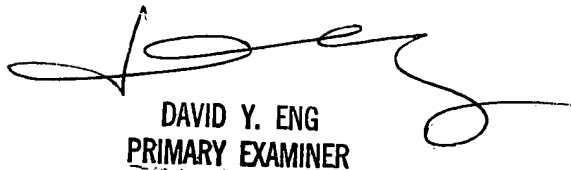
For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,
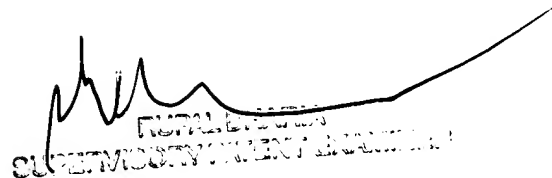
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